



MISSOURI DEPARTMENT OF
HEALTH

Mel Carnahan
Governor

Ronald W. Cates
Interim Director

P.O. Box 570, Jefferson City, MO 65102-0570 • 573/751-6400 • FAX 573/751-6010

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MAY 05 1997

SUPERFUND DIVISION

Site:	Martha Rose
ID #:	MOD980633069
Break:	6.1
Other:	4-8-97

April 8, 1997

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APR 09 1997

HAZARDOUS WASTE PROGRAM
MISSOURI DEPARTMENT OF
NATURAL RESOURCES

Gary Behrns
Hazardous Waste Program
Division of Environmental Quality
Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102-0176



40026659
SUPERFUND RECORDS

Dear Mr. Behrns:

The Missouri Department of Health has been asked by members of your staff to resubmit our reasons for recommending the continuation of groundwater monitoring at the Martha Rose Chemical Site. This request was triggered by the continued requests of the Rose Chemical Steering Committee to discontinue monitoring that was to be conducted for 10 years. The Steering Committee wants to terminate groundwater monitoring after a single year of testing.

Our reasons for recommending continued monitoring of this site are numerous. It is our belief that this site was never adequately characterized and that the remedial activities conducted were not adequate to protect public health. For these reasons, we supported your department in their decision not to concur with the ROD that the United States Environmental Protection Agency (EPA) signed. Attached to this letter are copies of some of the correspondence that this site has generated over the years.

In 1986, Region VII had 65% of all PCB disposal activity in the country. Congressman Mike Synar (OK) alleged that Region VII attracted PCB disposal because of lax enforcement. The following year, Congressman Alan Wheat (MO) agreed, noting "it's clear to me the EPA has not done its job the way it should have been done." Region VII's handling of PCBs has attracted national attention, including a Congressional investigation, all of which lends support to our opinion that EPA, Region VII has a long history of irresponsibility toward PCBs, and toward the Rose Site in particular. If Region VII allows the PRPs to terminate groundwater monitoring it will be another poor decision that they have made regarding this site.

Our specific comments regarding the termination of groundwater monitoring will be separated into two parts. First will be comments related to the characterization and remediation of the site. These comments are germane to the groundwater monitoring because the monitoring is currently the only remaining avenue the state has for monitoring the site for potential public health impacts. Second will be comments related directly to the termination of groundwater monitoring. Most of these comments are restatements of those included in our September 4, 1996 letter on this same issue.

Gary Behrns
April 8, 1997
Page 3

only that it would be monitored for 10 years. It is entirely appropriate, and indeed prudent, to insist that monitoring continue. The ROD itself, states that "the shallow groundwater at the site must be restored to its beneficial uses." Clearly, this is not being done and terminating the monitoring can in no way advance this goal.

We hope that this elaboration of our position clarifies this matter. If, however, you would like additional information, please call me at (573) 751-6404.

Sincerely,



Randall D. Maley, M.P.H.
Environmental Specialist III
Bureau of Environmental Epidemiology

RDM/mdh

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MAR 27 1997



Mel Carnahan, Governor • David A. Shorr, Director

HAZARDOUS WASTE PROGRAM
MISSOURI DEPARTMENT OF
NATURAL RESOURCES

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF GEOLOGY AND LAND SURVEY

P.O. Box 250 111 Fairgrounds Rd. Rolla, MO 65402-0250

(573) 368-2100

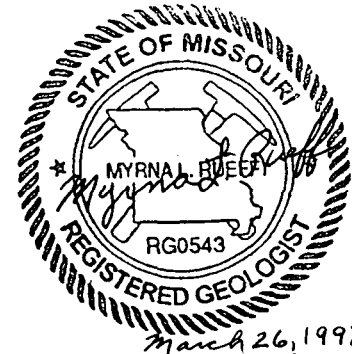
FAX (573) 368-2111

MEMORANDUM

DATE: March 26, 1997

TO: Don VanDyke, Environmental Specialist
Hazardous Waste Program, DEQ

FROM: Myrna Rueff, Geologist, Environmental Geology Section
Geological Survey Program, DGLS



SUBJECT: Summary of Issues Related to the Martha Rose Chemical Site

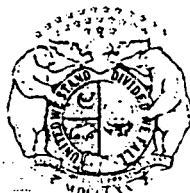
LOCATION: Sec. 10, T. 45 N., R. 28 W., Johnson County

As requested by Steve Sturgess, I have compiled a summary of DGLS issues of concern related to the Martha Rose Chemical site. The following issues are not ranked in any particular order.

- The absence of a upgradient contaminant-free groundwater monitoring well.
- DGLS believes that sampling for specific PCBs has been inconsistent.
- The premiss that the PCBs initially identified in samples from MW-204 and MW-207 were caused by PCB contaminated dust was proved to be incorrect by testing for PCBs in the dust as reported in the FS. See the attached memorandum by Jim Fels dated February 28, 1990.
- DGLS is not convinced that PCBs are absent from in the shallow groundwater at the Martha Rose Chemical site. The steering committee has concluded that, because wells MW-204 and MW-207 (initial sample from both wells indicated the presence of PCBs) have not produced a post-remediation sample, there are no contaminants of concern in the shallow groundwater. This is an erroneous interpretation. A more likely reason that these and other wells on site have gone dry is that they are not intercepting shallow groundwater. The steering committee should make the extra effort to obtain samples from those wells [MW-204, MW-207, MW-208 and MW-215]

JOHN ASHCROFT
Governor

G. TRACY MEHAN III
Director



STATE OF MISSOURI

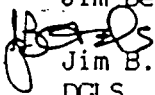
DEPARTMENT OF NATURAL RESOURCES

MEMORANDUM

Division of Energy
Division of Environmental Quality
Division of Geology and Land Survey
Division of Management Services
Division of Parks, Recreation,
and Historic Preservation

DATE: February 28, 1990

TO: Jim Bell, Superfund Section, WMP-DEQ

FROM:  Jim B. Fels, Engineering/Environmental Geology Section,
DGLS

SUBJECT: Review of the Draft Feasibility Study for the Martha Rose
Chemical Site, Johnson County

After reviewing the Draft Feasibility Study for remediation at the Martha Rose Chemical Site, I have only a few comments. My main concern is with regard to groundwater. Granted there isn't anticipation of deep groundwater contamination by PCB's at this site, but I feel the shallow groundwater should be adequately addressed as far as remedial matters. Both PCB's and VOC's were found in shallow groundwater during sampling events and is suspected to be discharging into the unnamed tributary of East Pin Oak Creek at a slow rate. If the shallow groundwater is not addressed and the levels of contaminants are high enough, this could be a long term source of contamination to surface waters.

The PCB levels found in the shallow groundwater during sampling events number 1 and 2 were more or less disregarded by Burns & McDonald because of what they considered to be cross contamination of PCB contaminated dust. But later in the report it is stated that dust was sampled and was found to be free of PCB's. It appears that sampling events Number 1 and 2 were accurate and low levels of PCB are present in the shallow groundwater.

My last concern is the depth to shallow groundwater. In some of the wells the water comes within 4 feet of the surface and seasonal fluctuations may bring the water even closer to the surface. If the contaminated soil is not removed, migrating shallow groundwater could come into contact with this soil and pose future problems. This would need to be addressed if Alternative 5 is chosen. If Alternative 7 is chosen, the shallow groundwater could cause minor excavation problems if the removal was to be that deep.

Save

DEMPSEY & KINGSLAND
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW

SUITE 602
1125 Grand
Kansas City, Mo. 64106

LELAND F. DEMPSEY
ROBERT D. KINGSLAND

816-421-6868

September 16, 1987

Wayne Schramm
Department of Health
P.O. Box 570
Jefferson City, Missouri 65102

Re: Stillwell

Dear Mr. Schramm:

I am an attorney who represents an infant, Joshia Stillwell, and his parents Leonard and Tonia Stillwell of Independence, Missouri. Mr. Stillwell was employed at Rose Chemical Company in Holden, Missouri. Their child was born with certain serious birth defects in 1986. The Stillwells have retained me to ascertain among other things whether Joshia's birth defects were caused by his exposure prenatally or by the parents' exposure to PCB's.

In this regard, I interviewed a number of ex-employees of Rose Chemical Company and their wives, the majority of which had extensive exposure to PCB oils or gasses emitted during the cutting of transformers with blow torches. Of a total of twenty-three pregnancies that I have been able to acquire information about, eleven resulted in normal births (52.2%), seven in miscarriages (30.4%), two stillborn (11.5%) and two with serious birth defects one of which died at one and one half months (11.5%). Not all of the births or miscarriages have been confirmed.

I am currently acquiring from the Environmental Protection Agency certain employment and payroll records of Rose Chemical Company which hopefully will identify other ex-employees of Rose Chemical Company. I hope to complete at that time interviews with more of those employees so as to determine whether the instances of miscarriages/stillbirths/birth defects are greater among this group than either the historical average for the Holden/Johnson County area or among the non-employees of Rose Chemical in the Holden/Johnson County area.

In this regard, I had a conversation with Mr. Darrell Roberts who told me a little bit about the reproductive outcomes data base for the years 1975 through 1985. It is my hope, that I



JOHN ASHCROFT
GOVERNOR

MISSOURI DEPARTMENT OF HEALTH

January 28, 1986

Mr. Ralph Bicknel
National Institute for Occupational Safety and Health
Region VII
601 East 12th, FOB, 5th Floor West
Kansas City, MO 64106

Dear Mr. Bicknel:

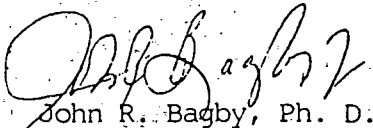
This is a follow up to your telephone conversation of January 23, 1986 with Dr. Crellin. The Missouri Department of Health requests that the National Institute for Occupational Safety and Health (NIOSH) conduct a health hazard evaluation of Rose Chemical in Holden, Missouri. This request is stimulated by the attached laboratory results from the Michigan State Public Health Laboratory.

[REDACTED], an employee at Rose Chemical for nine months, was found to have levels of polychlorinated biphenyls (PCB's) of 314 parts per billion (ppb) in his blood serum. Mr. [REDACTED] also appears to have suffered from chloracne. He is presently [REDACTED]. Also attached are several other items of information about Rose Chemical and the situation at Holden, Missouri that may be of interest.

Both the Environmental Protection Agency and the Occupational Safety and Health Administration have been involved with the problem of PCB's at Rose Chemical and perhaps could be contacted for information on their investigations at the site. We are requesting your aid in this situation because of the evidence provided from Mr. [REDACTED] that high levels of exposure to PCB's may be occurring among at least some of the workers at the plant. We believe that a thorough medical investigation is warranted.

If you have any questions or comments about this request, please contact Dr. Crellin or James Kountzman at 314-751-8209.

Sincerely,


John R. Bagby, Ph. D.

Acting Director
Division of Environmental Health and
Epidemiology Services

JRB/JRC/rh

attachments

BCC - [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Telephone: (314) 751-2335

Post Office Box 570

Jefferson City, MO 65102

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MISSOURI DEPARTMENT OF
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Coleen Kivlahan, M.D., M.S.P.H.
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September 4, 1996

HAZARDOUS WASTE PROGRAM
MISSOURI DEPARTMENT OF
HEALTH

FILE COPY

FILE COPY

Gary T. Behrns
Chief
Superfund Section
Division of Environmental Quality
P.O. Box 176
Jefferson City, MO 65102-0176

Dear Mr. Behrns:

Missouri Department of Health (DOH) received documents from your department on the Martha Rose Chemical Site. We were asked to provide input on the Steering Committee's request to cease monitoring. The submitted documents were reviewed by Cherri Baysinger-Daniel, Geanine Howard, Pam Holley and Randy Maley. Based on their review, our Department recommends that groundwater monitoring be continued due to the following:

- The two monitoring wells that initially detected PCBs in the shallow aquifer or soils above the bedrock (MW-204 and MW-207) have not been analyzed since the site underwent remediation. Well 204 was not analyzed in the three sampling rounds to date. Well 207 was damaged during clean-up. A replacement well (MW-207R) was put in nearby, but it is screened at a different depth. The lower concentrations in well 207R can not be used to infer that the concentrations in well 207 are decreasing.
- Testing for PCB concentrations in the remaining wells has not been a consistent process. During testing in some of the wells, for example, both PCBs have been excluded from analysis, Aroclor-1242 was tested for but not Aroclor 1254/60, or filtered samples of both Aroclors were analyzed but not unfiltered samples. To establish the presence of a plume or to determine if concentrations in any contaminated well are decreasing, there should be consistency in sampling and testing. Results from well 201, 204, 207R, 208, 214, and 215 can not be used to determine processes going on below the site with any certainty.
- Well 210, in the northeast corner of the site, has increasing concentrations of PCBs, VOCs and SVOCs. This well is adjacent to the main building which sits on a drainage divide. The other shallow wells are upgradient of drainage or downgradient



TO: The Record

THROUGH: Gale Carlson *GC*

FROM: Randall Maley *RM*

DATE: February 21, 1992

SUBJECT: Martha Rose Chemical Site

On Monday, February 10, 1992, I received a phone call from Jim Kavanaugh. He stated that EPA was planning to remove the deed restrictions from the Record of Decision on the Martha Rose Chemical Site. He said that EPA would be calling "in the next couple of days" to discuss their plans. EPA called later that day and said their attorneys felt that the deed restrictions were not legally justifiable and would cause EPA problems in court.

I reviewed our PCB risk assessment including our cleanup levels. I calculated that our any-use level of .65 ppm was justifiable and then stated that we stood by our value. In discussions with EPA personnel in Washington, they agreed that our any-use level was basically consistent with theirs. The difference is that EPA feels that placing a 10" cover over the PCB contaminated soil reduces the risk by an order of magnitude. Our feeling is that this risk reduction depends on the cover remaining in place - which we feel requires deed restrictions.

Finally, EPA stated that they had decided to leave the deed restrictions in place; that it was more trouble to justify the risk management decision than to justify the need for a cover.

RM:je



MISSOURI DEPARTMENT OF
HEALTH

John Ashcroft
Governor

John R. Bagby, Ph.D.
Director

P.O. Box 570, Jefferson City, MO 65102 • 314-751-6400 • FAX 314-751-6010

February 14, 1992

Nick Di Pasquale, Director
Waste Management Program
Department of Natural Resources
Jefferson Building
Jefferson City, Missouri 65101

Dear Mr. Di Pasquale:

This letter is in regard to recent discussions on the Martha Rose Chemical Site in Holden, Missouri. We have been in consultation with the Environmental Protection Agency, the Agency for Toxic Substances and Disease Registry, and with Bob Geller, Jim Belcher and Jim Kavanaugh, of your department, concerning the Record of Decision (ROD) on this site.

Earlier this week, we reviewed our Any-use Soil Level (ASL) for PCBs. This review confirmed our established soil level of .65 ppm for PCBs in an unrestricted situation. Our figure is in basic agreement with the EPA's PCB Spill Policy, which states (paragraph 2 under Section 3.1.1) "(a) concentration of 1 ppm PCBs equates to approximately a 10^{-5} excess cancer risk assuming no soil cover or management controls."

We also agree that covering PCB-contaminated soil will decrease the health risk involved. Unfortunately, because the EPA does not want to place deed restrictions on the property, and want to basically "walk away" from the site, we can not concur with their decision. Without any deed restrictions, EPA has no control over future land use. Therefore, EPA can not ensure that someone will not remove the protective cover at a later date, or grade the cover onto a small portion of the site. Such recontouring might well occur if the site were to be developed for residential use.

In a PCB spill in an established area, only a small area would be expected to be affected, and concentration would be expected to decrease at depth. At this site, however, an area of several acres is contaminated, and in some areas the contamination is as much as 20 feet below the surface.

From EPA's point of view, this may be viewed as a risk management decision. The Missouri Department of Health uses a 1 in 100,000 excess lifetime cancer risk as our "acceptable level". EPA, on the other hand, uses a cancer risk range of 10^{-4} to 10^{-6} as



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File: Martha C. Rose Chemical Plant
Johnson County

JOHN ASHCROFT
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G. TRACY MEHAN III
Director



STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF ENVIRONMENTAL QUALITY
P.O. Box 176
Jefferson City, MO 65102

Division of Energy
Division of Environmental Quality
Division of Geology and Land Survey
Division of Management Services
Division of Parks, Recreation,
and Historic Preservation

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JUN 12 1991

**Bureau of
Environmental Epidemiology**

June 11, 1991

Mr. Steven E. Kinser
U.S. Environmental Protection
Agency, Region VII
726 Minnesota Avenue
Kansas City, KS 66101

RE: Comments on the Draft Proposed Plan for the Martha C. Rose Site,
Holden, Missouri

Dear Mr. Kinser:

Review of the "final" draft Proposed Plan (dated May 14, 1991) has been completed by the Missouri Department of Natural Resources (MDNR). Staff from the Division of Geology and Land Survey, the Division of Environmental Quality's Waste Management and Laboratory Services Programs, and the Missouri Department of Health (MDOH) conducted the review. The State has identified some areas of major concern and offer the following comments for your consideration:

1. Although it is well established that all commercial PCB mixtures are potentially contaminated with dibenzofurans, the sampling at this site did not include analysis for dioxins or dibenzofurans. Therefore, the Endangerment Assessment performed at this site did not include them as indicator chemicals. Because of this oversight, the assumptions made in the RI/FS may not be valid and the health risks associated with this site may be several orders of magnitude higher than those given in the RI/FS. We feel that the U. S. Environmental Protection Agency (EPA) should take the possibility of extensive dibenzofuran contamination into consideration when deciding what levels of waste to incinerate/remove. It is likely that the soils/concrete with the highest levels of PCB contamination also contain the highest levels of dibenzofurans. We feel that all soils above 100 parts per million (ppm) and all concrete contaminated above 500 ppm should be incinerated.

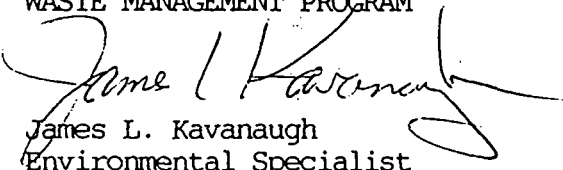


Mr. Steve Kinser
June 11, 1991
Page 3

Thank you for the opportunity to comment on this draft Proposed Plan.
Should you have questions regarding our review or comments, please contact
me at (314) 751-3176.

Sincerely,

WASTE MANAGEMENT PROGRAM



James L. Kavanaugh
Environmental Specialist

JLK:sh

c: Mr. Brian Allen, Laboratory Services Program
Mr. Jim Fels, Division of Geology and Land Survey
Mr. Randy Maley, Missouri Department of Health ✓



MISSOURI DEPARTMENT OF
HEALTH

John Ashcroft
Governor

John R. Bagby, Ph.D.
Director

P.O. Box 570, Jefferson City, MO 65102 • 314-751-6400 • FAX 314-751-6010
June 5, 1991

Edwin Knight
Chief, Superfund Section
Waste Management Program
Department of Natural Resources
Jefferson State Office Building
Jefferson City, MO 65102

RE: Martha Rose Chemical Site, Holden

Dear Mr. Knight:

The Missouri Department of Health cannot concur with the Environmental Protection Agency's (EPA's) proposed alternative for the Martha Rose Chemical site. The facility handled 23 million pounds of PCBs. Commercial PCB mixtures are well known to contain extremely hazardous contaminants. To quote other state health departments, "any [commercial] PCB mixture should be suspected of [dibenzofuran] contamination" (Washington Dept. of Social and Health Services) and "all commercial mixtures of chlorinated biphenyls are potentially contaminated with polychlorinated dibenzofurans" (California Dept. of Health Services). Even though it is well established that PCBs are commonly contaminated, the sampling at this site did not include dioxins or dibenzofurans. Therefore, the Endangerment Assessment performed at this site did not include them as indicator chemicals. Because of this oversight, the assumptions made in the RI/FS may not be valid and the health risks associated with this site may be several orders of magnitude higher than those given in the RI/FS.

Since October of 1989, we have stated on several occasions that sampling for dibenzofurans should be performed at this site. We do not wish to delay the cleanup of this site; however, we do feel that the EPA should take the possibility of extensive dibenzofuran contamination into consideration when deciding what levels of waste to incinerate/remove. It is likely that the soils/concrete with the highest levels of PCB contamination also contain the highest levels of dibenzofurans. We feel that all soils above 100 parts per million (ppm) and all concrete contaminated above 500 ppm should be incinerated.

We have several other reservations about the proposed plan for this site. On pages 17 and 18, the plan calls for "all soil contaminated at levels significantly above 100 ppm will be incinerated." Nowhere does the plan give a definition for "significantly above". We feel all soil contaminated above 100 ppm should be incinerated. Also on page 17 is the sentence, "It is not anticipated that any sediment will exceed 100 ppm." No





Missouri Department of

HEALTH

John Ashcroft
Governor

Robert Harmon, M.D.
Director

P.O. Box 570, Jefferson City, MO 65102 • 314/751-6400 • FAX 314/751-6010

October 16, 1989

Nicholas Di Pasquale, Director
Waste Management Program
Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65101

Dear Mr. Di Pasquale:

Thank you for the opportunity to review the Endangerment Assessment (EA) for the Rose Chemical site. Based on the information supplied to Environ, we believe the assumptions made in the EA are generally valid. We have some areas of concern, but generally believe it to be a well thought-out document. We do, however, have concerns about areas that have been omitted from the assessment.

Because the EA was the only portion of the Remedial Investigation supplied to us, we are concerned that the Hazard Identification stage of the assessment may be inadequate, and that more appropriate indicator chemicals may exist. Specifically, we are concerned that the site may contain significant concentrations of dioxins and/or dibenzofurans. The Washington Department of Social and Health Services has stated: "any [commercial] PCB mixture should be suspected of [dibenzofuran] contamination". Rose Chemical handled large quantities of PCB's. It is reasonable to assume that some of the commercial PCB mixtures they handled may have been contaminated with dioxins or dibenzofurans. As the Toxicological Evaluation hinted, it is difficult to assess the true toxicity of commercial PCB mixtures due to the contamination of PCB's with more toxic chemicals.

The main area with which we disagree with the EA involves the definition of what is a "reasonable worst case" scenario. For instance, according to the EA, ground water ingestion is not considered to be a route of exposure. To quote the assessment "[wells are] not considered viable sources of drinking water because of low water yields." In other areas of the state, we have

MEMORANDUM



Missouri Department of

HEALTH

TO: Gale M. Carlson
Environmental Specialist
Bureau of Environmental Epidemiology

FROM: Randall Maley *rm*
Environmental Specialist
Bureau of Environmental Epidemiology

SUBJECT: Rose Chemical File

DATE: October 19, 1988

On October 18, 1988 I received a phone call from Ms. Jane Mason from the Kansas City office of the FBI. They are conducting a criminal investigation which involves the Rose Chemical Plant and would like to look and/or make a copy of our files. Ms. Mason will be down sometime the week of October 31-November 4 to review the file. She will contact us sometime next week to set up a time. I requested she send us a written request or bring one with her.

RM:vh